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Proposed Priority

Auto Salvaging (SIC 5093 and 5015, NAICS 42193 and 421140)

Universe & Types of Facilities

This sector includes auto wreckers primarily engaged in dismantling motor vehicles for the purpose of wholesaling scrap and for the purpose of selling parts (automotive salvage yards and automotive dismantlers). The automotive recycling businesses employ about 47,000 people at more than 6,700 businesses in the U.S. An estimated 78% of automotive recycling companies are full-service and 86% employ 10 or fewer people (Automotive Recycling Industry Profile - 1988). In 1997 alone, approximately 4.7 million vehicles were acquired for recycling in North America.

Geographic Range

Nationwide.

Environmental Risks

Contamination can arise from the wide range of materials at automotive salvage facilities. These include: petroleum products such as gasoline, diesel fuel, motor oil, transmission fluid, power steering fluid, and brake fluid; engine coolants and additives; chlorofluorocarbons (CFCs); metals such as iron, chromium, lead, copper, and aluminum; battery acid; brake and clutch linings; rubber; sodium azide from un-inflated air bags; mercury-containing switches, and other materials. Additional potential sources of environmental contamination at salvage yards include a variety of waste products such as scrap metal, Polychlorinated Biphenyls (PCBs)-containing fluids from heavy electrical equipment (motors, transformers, and capacitors), appliances, heating and air conditioning systems, hot water tanks, and other heavy waste materials.

At salvage facilities, the contamination of soil, surface water, and groundwater is a primary concern. At many sites, the ground is often heavily contaminated with oils, hazardous fluids, and other pollutants due to improper handling. Through infiltration, these fluids can contaminate surface soils, subsurface soils and ultimately the groundwater. Storm water runoff can lead to surface water contamination.

The outdoor operation of metal shredders creates large quantities of fugitive dust. Additionally, approximately 500 pounds of non-ferrous automobile shredder residue (ASR) is produced for each car recycled. Fluff (one component of ASR), which is made up of the non-metal components of a car including glass, ceramics, cloth, rubber, plastic, and foam, may contain sufficient quantities of a variety of toxic substances, including heavy metals (e.g., cadmium, lead, and mercury) to classify shredder fluff as hazardous waste.

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The release of CFCs not recovered pose a risk to the earth's ozone layer. Mercury, a bioaccumulative, persistent toxic, found in mercury switches in vehicles (contain 800 mg of mercury), threatens the health of humans and wildlife, even in extremely small quantities. Additional sources of environmental risk include facilities that operate sweat furnaces on site for secondary metal recycling which can release dioxin/furans if these units are not operated properly (many of these minor sources are subject to the Secondary Aluminum MACT).

In both urban and rural areas, auto salvage facilities tend to be concentrated in poor and minority neighborhoods and communities, areas typically suffering from pollution from a number of industries and facilities.

Noncompliance Information

A number of facilities in this sector have had storm water compliance issues. For example, an EPA storm water initiative in the Anacostia watershed in Washington DC, found significant storm water noncompliance issues at some auto salvage facilities. Additionally, some compliance issues with potentially contaminated fluff were identified. EPA has not had a significant focus on this sector but its limited experience suggests that there is noncompliance with storm water, CFC and other environmental requirements. Many facilities do not have good accounts of the amounts of fluids drained from salvaged automobiles, chemicals found in these fluids or documentation regarding their disposal. There is concern that some of these facilities could require soil remediation.